CT Brain Extraction

The CT brain extraction application was developed to remove non-brain tissue from a CT volume. There are several applications developed to de-skull the brain in a MR image (e.g. Brain Extraction Tool or BET), however, these applications typically do not work on CT data. This CT brain extraction program pre-processes a CT head image so that it appears more like an MR image and then calls the BET program for the remainder of the de-skulling process.

- **Step 1:** Select New Folder under the File menu and use the Open Image dialog box to open the MR image named \$PXHOME/images/tutorials/ct2strip.tif.
- **Step 2:** Select the **CT Brain Extraction** option under the **Volumetric** menu in the toolbox.
- **Step 3:** You must enter the Fractional intensity threshold. This value has a range of 0 to 1. Smaller values give larger brain outline estimates. The default value is 0.1 as seen in Figure 1. Select the OK button.

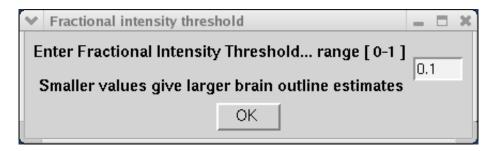


Figure 1

Step 4: To see the results of the de-skulling process, select the Display→Orthogonal option in the MEDx folder. You will see the de-skulled brain as in Figure 2.

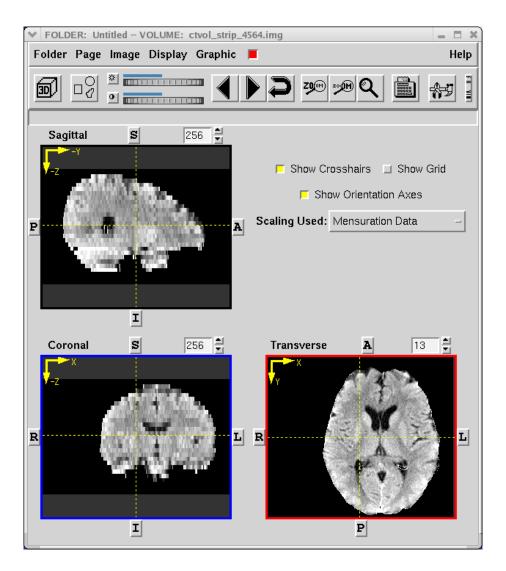


Figure 2